

***NATIONAL WEATHER SERVICE EASTERN REGION SUPPLEMENT 02 -2003***

***APPLICABLE TO NWSI 10-513***

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***Operations and Services***

***Public Weather Services, NWSPD 10-5***

***WFO Winter Weather Products Specification, NWSI 10-513***

***WINTER WEATHER WATCH/WARNING/ADVISORY PROCEDURES, AND  
THRESHOLDS***

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**NOTICE:** This publication is available at: <http://www.nws.noaa.gov/directives/>.

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***SUMMARY OF REVISIONS:*** This instruction updates ER Supplement 02-2003 "Winter Weather Watch/Warning/Advisory Policy, Procedures, and Thresholds." Changes include new guidance on headline usage and hyperlinks to a Winter Weather Resource page.

<signed>

December 14, 2004

Dean P. Gulezian

Date

Director, NWS Eastern Region

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- 1) Purpose. The purpose of this Supplement is to document Eastern Region (ER) procedures for winter weather products in addition to the guidelines set forth in NWS Instruction 10-513 *WFO Winter Weather Product Specification*. In addition, the ER thresholds for issuing winter weather watches, warnings, and advisories are listed, a standardized snow report format is specified and some best practices are highlighted.
- 2) Background. Winter weather product inconsistencies between offices cause confusion and diminished customer confidence. In addition, the widespread use of computer graphics makes such inconsistencies more noticeable.
- 3) Policy. To maximize product utility, ER field offices must strive to issue externally consistent watch, warning and advisory (WWA) products. To accomplish this goal, forecasters must understand issuance thresholds, use the same interpretation of these thresholds, and collaborate with adjacent offices on hazard type, timing, and magnitude. Collaboration of forecasts delivers more consistent products and yields more accurate forecasts.
- 4) Issuance Procedures.
  - 4.1 Software. All ER offices will use AWIPS Watch/Warning/Advisory (WWA) software, or the latest nationally approved software, as the primary issuance tool for all winter weather watch/warning/advisory products. Snowfall amounts will be included in the Area Forecast Matrices (AFM) and Point Forecast Matrices (PFM) through three periods (36 hours) but are not to be included in the Coded Cities Forecast (CCF) or State Forecast Tabular (SFT).

- 4.2 Triggering Procedures. When forecast conditions are expected [to meet or exceed local winter weather criteria](#) within 12 to 48 hours, the appropriate WWA will be issued (see section 4.3). “Mid point values” (rounded up to the nearest inch) of the forecast snowfall range will serve as the primary criterion for WWA issuances.

Event duration, timing and rates of snow accumulation/ice accretion should also be considered when determining the need for a WWA, e.g. (high precipitation rate during a rush hour, first event of season, or long-duration event with high impact). WWAs may be issued based on public impact alone. For example, if a storm is not expected to reach warning criteria, but heavy, wet snow, or a mixture of snow, freezing rain and ice pellets will significantly affect rush hour or holiday transportation, commerce, or electrical power service, a warning headline can be used. This rule applies especially during early and late season storms, and in locations where winter weather is rare. See Supplement ERS 01-2004 *Winter Storm Verification*, filed with NWS Instruction 10-1601, for details on verification based on public impact.

Winter storm information will be mentioned in the Hazardous Weather Outlook (HWO) when there is a 30% chance or greater of meeting/exceeding warning criteria. A Special Weather Statement (SPS) mentioning the potential for a winter storm may also be issued, based on customer demand for event-driven notification (see section 4.8 for more details). Watches are recommended when there is a 50% or greater chance of meeting/exceeding warning criteria; warnings are recommended when there is an 80% or greater chance of meeting/exceeding warning criteria.

For wind chill WWAs, the colder boundary of the forecast wind chill interval will serve as the criterion for issuance. Release of winter storm products and their updates should be timed to occur prior to scheduled news broadcast times.

- 4.3 Authorized Headlines. ER offices will use the following types of headlines in WSW segments:

- **Winter Storm Watch/Winter Storm Warning/Winter Weather Advisory/Cancellation**
- **Lake Effect Snow Watch/Warning/Advisory/Cancellation**
- **Wind Chill Watch/Warning/Advisory/Cancellation**
- **Blizzard Watch/Warning/Snow and Blowing Snow Advisory \*/ Blowing Snow Advisory\*/Cancellation**
- **Winter Storm Watch/Ice Storm Warning \*/Freezing Rain Advisory \*/Cancellation**
- **Winter Storm Watch/Heavy Snow Warning \*/Snow Advisory \*/Cancellation**

*Issuance of an event specific advisory or warning requires a **high level of confidence**. If the event precipitation type cannot be determined with a **high level of confidence**, or more than one winter weather precipitation type is possible, the forecast team will issue a Winter Storm Warning or Winter Weather Advisory.*

- 4.4 Content of Segments. The four basic segment types (cancellation, warning, advisory or watch) may be subdivided into as many zone groupings as needed to address differing precipitation types or amounts across the forecast area. For cancellation segments, a UGC expiration time of one hour will be used. Forecasters must keep each segment's text **brief and to the point**. The basis of the warning (quantitative values and phenomena) should be included in the first sentence (e.g., "A quarter to one-half inch of ice accumulation expected. Travel will be hazardous, with downed tree limbs and power outages possible.") **Localized extreme snowfall values should not be mentioned**, as most people will not observe the extremes. References and/or comparison to historical events will be reserved for warning situations and should only be mentioned if confidence is high that a comparable event is unfolding.
- 4.5 Reporting Storm Events. Public Information Statements (PNS) will be the primary public product to summarize the latest winter precipitation, high wind observation or wind chill occurrences to the public, and will be done using the format shown in resource links (see Section 5). A disclaimer must be appended to the PNS noting that the information within the PNS is UNOFFICIAL.  
  
At a minimum, PNSs should be issued every three to six hours during an event, especially prior to scheduled news broadcast times. Observations and related reports are permitted in other products to support warning or advisory content.
- 4.6 Local Issuance Delays. Offices will not develop local policies which routinely mandate delays in issuing WWAs, e.g. never issuing a "Winter Storm Watch" for the third period or a "Winter Storm Warning" for the second period. Issuances should be based on science and forecaster consensus. In addition, updates should be issued prior to the expiration time of the earlier warning to avoid gaps in warning coverage.
- 4.7 NWS Attribution. To identify the NWS as the information source, all **initial** advisory, watch, and warning segments should begin with "The National Weather Service...". Additionally, the segment should end with "Stay tuned to NOAA Weather Radio or your favorite media source of weather information for the latest updates."
- 4.8 Relationship to Outlooks. Winter Storm Outlooks: information on impending winter storms in days 1-7 will be included in the HWO. WFOs may issue SPSs in addition to the HWO based on customer need or NWR dissemination requirements. However, the phrase "Winter Weather Outlook" will not be used in the Mass News Disseminator (MND) or headline of a SPS.

- 4.9 Best Practices. ER has instituted a Best Practices Program to promote WFO operational excellence through the sharing of both operational and training procedures, methods, and strategies common to superior performing programs. This document can be viewed by accessing the [Eastern Region Watch/Warning Advisory Resource Page](http://www.werh.noaa.gov/MSD/Resources/Winter/resource.htm) at <http://www.werh.noaa.gov/MSD/Resources/Winter/resource.htm>

All ER WFOs are expected to review and incorporate the documented winter weather best practices into their pre-season preparation activities (drills, training, etc) and operations.

- 5) Criteria. Warning and Advisory criteria can be viewed by accessing the [Eastern Region Watch/Warning Advisory Resource Page](http://www.werh.noaa.gov/MSD/Resources/Winter/resource.htm) .